



#10

1

Amelt B

SEQUENCE LISTING

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TECH CENTER 1600/2900

<110> Schnable, Patrick S.
Liu, Feng
Fu, Yan

<120> NUCLEIC ACID MOLECULES ENCODING MULTIPLE
START CODONS AND HISTIDINE TAGS

<130> 08411-027001

<140> US 09/897,776

<141> 2001-06-29

<150> US 09/732,990

<151> 2000-12-08

<150> US 60/169,725

<151> 1999-12-08

<160> 37

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 93

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetically generated oligonucleotide

<221> CDS

<222> (1)...(84)

<221> CDS

<222> (88)...(93)

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48

Lys Leu His His His His His His Ala Ser Pro Pro Pro Pro Arg Ile

1

5

10

15

atc atc acc atc acc tcg agc gtc aca cta gct gag taa gca tgc

93

Ile Ile Thr Ile Thr Ser Ser Val Thr Leu Ala Glu Ala Cys

20

25

30

<210> 2

<211> 66

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetically generated oligonucleotide

<400> 2

gtaccaccca ccatcatcat cacgcatcac caccaccacc acgcatcatc atcaccatca 60
cctcga 66

<210> 3
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<220>
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<400> 3
ctgcagcggc cgcg 14

<210> 4
<211> 22
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<220>
<223> linker

<400> 4
ctaggcgccg gcgacgtctc ga 22

<210> 5
<211> 16
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<220>
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<400> 5
ctagctgcag atatca 16

<210> 6
<211> 16
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<220>
<223> linker

<400> 6
agcttgatat ctgcag 16

<210> 7
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<400> 7
ccatcgatcc gagatagggt tgagt 25

<210> 8
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<220>
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<400> 8
acgagctcag gcagagacga 20

<210> 9
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acgagctcgc agagacgacg 20

<210> 10
<211> 26
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<220>
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<400> 10
cctcgagtca cacaggaaac agctaa 26

<210> 11
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<212> DNA
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<220>
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<400> 11
ggctagcagc tgtttcctgt gtga 24

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<220>
<223> primer for PCR

<400> 12
gtggagcatc tggtcgca 18

<210> 13

<211> 37
 <212> DNA
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<220>
 <223> primer for PCR

<400> 13
 gagatctgcc ataacatgtc atcatagctg tttcctg 37

<210> 14
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<220>
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<400> 14
 ctagccgaaa ttaatacgac tcactatagg gagac 35

<210> 15
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 <212> DNA
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<220>
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<400> 15
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 accacc 66

<210> 16
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 <212> DNA
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<220>
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<400> 16
 gacgtcgcag gcttactcag ctagtgtgat ggtgatgatg atggcctatg gtggtggtgg 60
 tgatgcg 67

<210> 17
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<400> 17
 taatacgact cactataggg agaccacaac ggtttccctc tagaaataat tttgtttaac 60
 ttttaagaagg agatatacat atggcatggc atggcca 97

<210> 18
 <211> 13
 <212> DNA
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<220>
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<400> 18
 atggcatggc atg

13

<210> 19
 <211> 35
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> linker

<400> 19
 aattgtctcc ctatagtgag tcgtattaat ttcg

35

<210> 20
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
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<400> 20
 Lys Leu His His His His His Ala Ser Pro Pro Pro Pro Arg Ile
 1 5 10 15
 Ile Ile Thr Ile Thr Ser Ser Val Thr Leu Ala Glu
 20 25

<210> 21
 <211> 93
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<221> CDS
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<221> CDS
 <222> (80)...(91)

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 Ser Phe Thr Thr Ile Ile Ile Thr His His His His His His Ala Ser
 1 5 10 15

49

tca tca cca tca cct cga gcg tca cac tag ctg agt aag cat
 Ser Ser Pro Ser Pro Arg Ala Ser His Leu Ser Lys His

91

20

25

gc

93

<210> 22
 <211> 25
 <212> PRT
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<220>
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<400> 22
 Ser Phe Thr Thr Ile Ile Ile Thr His His His His His His Ala Ser
 1 5 10 15
 Ser Ser Pro Ser Pro Arg Ala Ser His
 20 25

<210> 23
 <211> 4
 <212> PRT
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<220>
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<400> 23
 Leu Ser Lys His
 1

<210> 24
 <211> 93
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<220>
 <223> Synthetically generated oligonucleotide

<221> CDS
 <222> (3)...(80)

<221> CDS
 <222> (84)...(92)

<400> 24
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 Ala Ser Pro Pro Ser Ser Ser Arg Ile Thr Thr Thr Thr Thr His
 1 5 10 15

cat cat cac cat cac ctc gag cgt cac act agc tga gta agc atg 92
 His His His His His Leu Glu Arg His Thr Ser Val Ser Met
 20 25

c

93

<210> 25
 <211> 26

<212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 25
 Ala Ser Pro Pro Ser Ser Arg Ile Thr Thr Thr Thr Thr His His
 1 5 10 15
 His His His His Leu Glu Arg His Thr Ser
 20 25

<210> 26
 <211> 93
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetically generated oligonucleotide

<400> 26
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 tggatgatgcg tgatgatgat ggtggtgaag ctt 93

<210> 27
 <211> 118
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetically generated oligonucleotide

<221> CDS
 <222> (1)...(99)

<221> CDS
 <222> (103)...(117)

<400> 27
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 Tyr Thr Tyr Gly Met Ala Trp Pro Leu Gln Asp Pro Pro Pro Ser Ser
 1 5 10 15
 tca cgc atc acc acc acc acc ata ggc cat cat cat cac cat cac act 96
 Ser Arg Ile Thr Thr Thr Thr Ile Gly His His His His His His Thr
 20 25 30
 agc tga gta agc atg cga cgt c 118
 Ser Val Ser Met Arg Arg
 35

<210> 28
 <211> 33
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 28

Tyr Thr Tyr Gly Met Ala Trp Pro Leu Gln Asp Pro Pro Pro Ser Ser
1 5 10 15

Ser Arg Ile Thr Thr Thr Thr Ile Gly His His His His His His Thr
20 25 30

Ser

<210> 29

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 29

Val Ser Met Arg Arg
1 5

<210> 30

<211> 118

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetically generated oligonucleotide

<221> CDS

<222> (2)...(70)

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<221> CDS

<222> (107)...(118)

<400> 30

t ata cat atg gca tgg cat ggc cac tgc agg atc cac cac cat cat cat 49
Ile His Met Ala Trp His Gly His Cys Arg Ile His His His His His
1 5 10 15

cac gca tca cca cca cca cca tag gcc atc atc atc acc atc aca cta 97
His Ala Ser Pro Pro Pro Pro Ala Ile Ile Ile Thr Ile Thr Leu
20 25 30

gct gag taa gca tgc gac gtc 118
Ala Glu Ala Cys Asp Val
35

<210> 31

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 31

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Ile His Met Ala Trp His Gly His Cys Arg Ile His His His His His
  1           5           10           15
His Ala Ser Pro Pro Pro Pro
                20
```

<210> 32

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 32

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Ala Ile Ile Ile Thr Ile Thr Leu Ala Glu
  1           5           10
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<210> 33

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetically generated peptide

<400> 33

Ala Cys Asp Val

<210> 34

<211> 118

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetically generated oligonucleotide

<221> CDS

<222> (3)...(95)

<221> CDS

<222> (99)...(116)

<400> 34

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ta tac ata tgg cat ggc atg gcc act gca gga tcc acc acc atc atc
  Tyr Ile Trp His Gly Met Ala Thr Ala Gly Ser Thr Thr Ile Ile
    1           5           10           15
```

```
atc acg cat cac cac cac cat agg cca tca tca tca cca tca cac
Ile Thr His His His His His Arg Pro Ser Ser Ser Pro Ser His
    20           25           30
```

```
tag ctg agt aag cat gcg acg tc
  Leu Ser Lys His Ala Thr
    35
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<210> 35
 <211> 31
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 35
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 1 5 10 15
 Thr His His His His His His Arg Pro Ser Ser Ser Pro Ser His
 20 25 30

<210> 36
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Synthetically generated peptide

<400> 36
 Leu Ser Lys His Ala Thr
 1 5

<210> 37
 <211> 118
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetically generated oligonucleotide

<400> 37
 gacgtcgcat gcttactcag ctagtgtgat ggtgatgatg atggcctatg gtggtggtgg 60
 tgatgcgtga tgatgatggt ggtggatcct gcagtggcca tgccatgcca tatgtata 118

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